

Public Health Protection for Private Unregulated Water Systems

Presented By:

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Livingston County, New York Selected Demographics

- ~ 64,000 residents
- Rural – Agriculture is the # 1 Industry
- ~ 43,000 Served by Public Water Systems
- ~ 21,000 Provided Water from Unregulated Systems
- There are many older homes



Is there a public health concern?

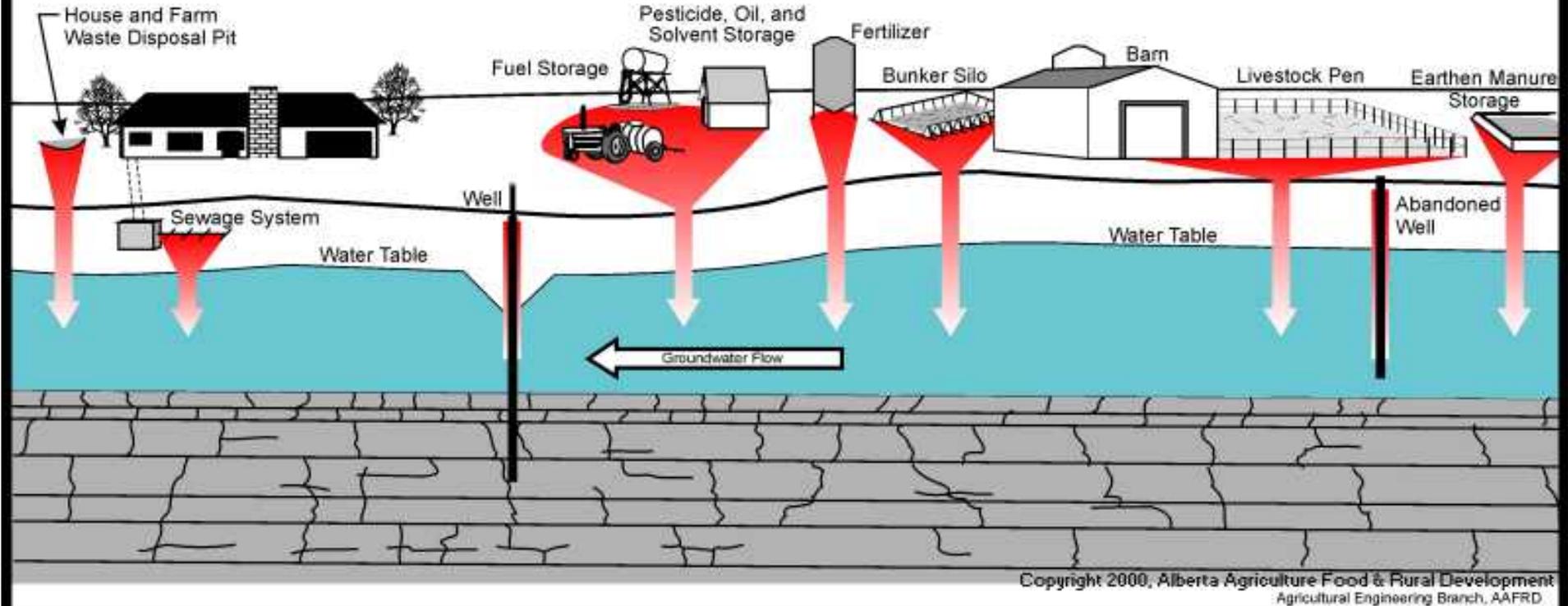
At unregulated water systems we observe:

- Water supplies that collect surface water or water under the influence of surface water.
- Water supply quantity problems.
- Water supply quality problems.
- Sometimes, there is a minimal understanding of the water supply system.
- We receive complaints!



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Potential Rural Contamination Sources



Surface water or shallow groundwater can be impacted by contamination sources.

Deep groundwater is filtered as it percolates downward.

Properly constructed wells can make a difference.

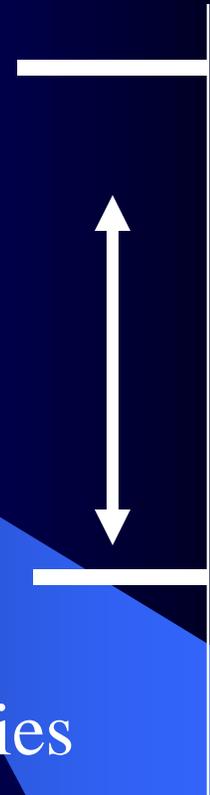


Our Vision

Eliminate water quality and quantity problems at private unregulated water systems in Livingston County, NY.

Current State

We receive complaints and know the deficiencies of some water supplies. We are aware of illnesses caused by water supply problems.



Have you seen this problem?



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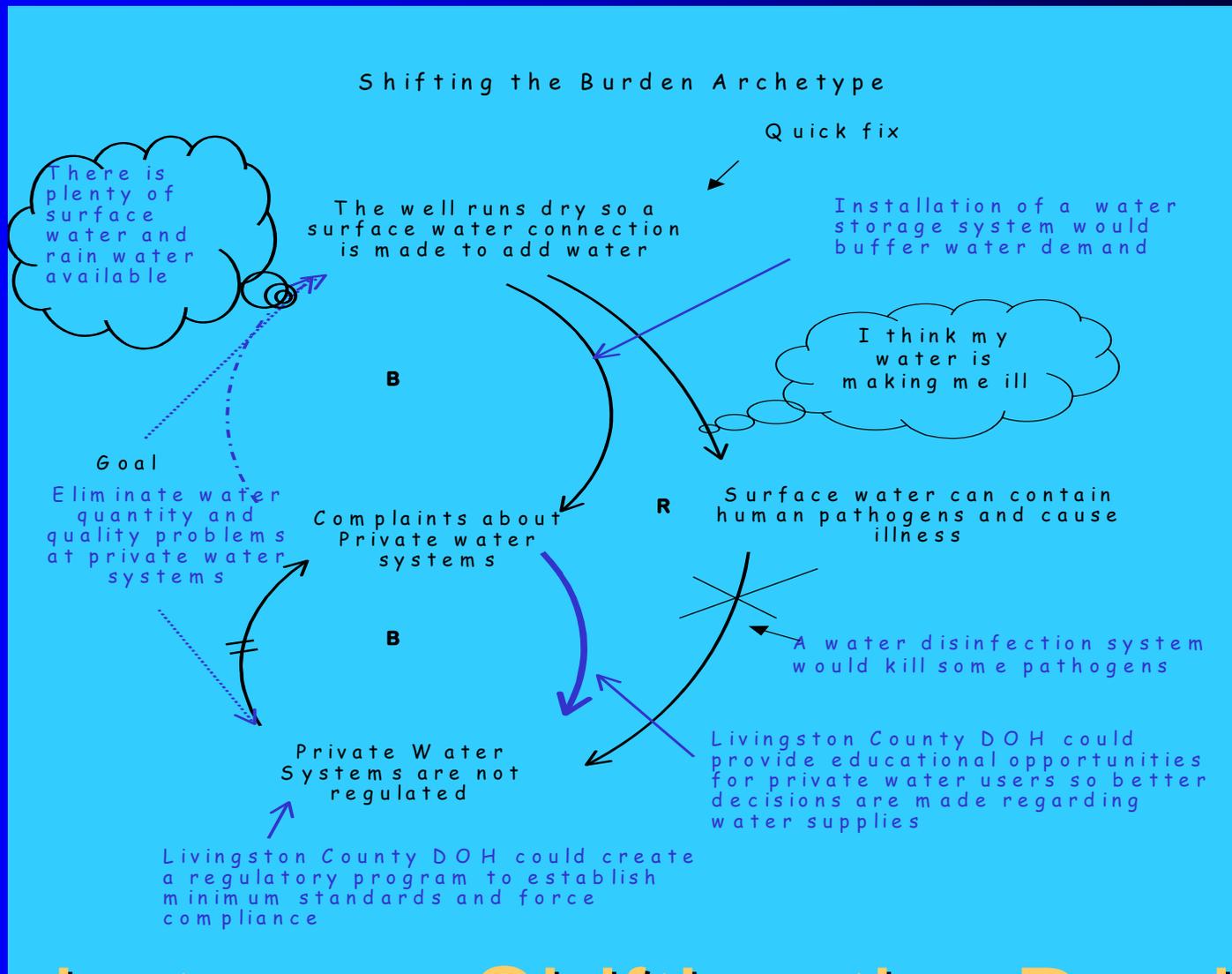
Project Focusing



- Identify Stakeholders
- Identify Adversaries
- Understand Politics
- Understand Underlying Issues
- Predict the Outcomes



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Archetypes: Shifting the Burden

Identified Interventions

Two potential interventions identified

- Regulatory Enforcement Program
 - DOH program costs and owner upgrade costs
 - Target **all** private water systems
 - Upgrades may be required for **all** systems
 - Could create adversaries
- Public Education Program
 - Focused on those with an interest
 - No mandated upgrade and associated expense



Logic Model

Public Education Program Planning

- Identify resources (haves and needs)
- Identify activities
- Determine outputs
- Plan to achieve short and long term outcomes
 - Make people aware of risks with water supply
 - Improve the health of private water system users



Accomplishments

- Prepared a presentation about water systems
- Staff have been trained to perform sanitary surveys for home water systems.
- Relevant literature has been identified

Next Steps

- Prepare advertisements and advertise
- Prepare enticements for the Workshop
 - (Food, Lab analysis discount, etc.)
- Hold the water workshop



Ten Essential Services

- Monitor Health Status
- Diagnose and Investigate
- Inform, Educate, and Empower
- Mobilize Community Partnerships
 - Develop Policies
- Enforce Laws and Regulation
 - Link People to Services
- Assure a Competent Workforce
 - Evaluate Effectiveness
- Research



National Goals Are Supported

A National Strategy to Revitalize EH Services states that:

- 22-30 million people drink unregulated water
- 14 million US households use domestic wells
- A large 1994 Survey of well contamination showed:
 - Total Coliform contamination was detected in 41.3%
 - E. Coli contamination was detected in 11.1%
 - Nitrate was detected in 65.4%
 - Atrazine (a pesticide) was detected in 13.6%



Any Questions?

Thank You

